Driveway Modeling Options in FDOTSS4

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Session Overview

- In this webinar, we will discuss two methods for modeling driveways for an urban design project and the advantages or disadvantages of each.
- The methods include:
  - Driveway Template Components
  - 3D Urban Driveway Civil Cell

Driveway Template Components

- Steps to Configure
  1. Place Reference Line (ConstLines)
     - Left Side of Driveway
  2. Place 2D Urban Driveway Civil Cell
     - Modify as needed, Clean Linework
  3. Copy Driveway > Modeling template from FDOT
  4. Set Curb Parent/Child Relationship for project template
  5. Add Drop Curb Driveway template to project template
     - Change Utility and SW widths to match project template
     - Check HFC targets and ranges
     - Add End Conditions/Tie Down Slab
     - Check Display Rule for Utility Strip change value to .05
  6. Change Project Design Stage Settings
     - Set Preliminary multiplier to 1 and Template Interval to 2
  7. Synchronize Template Drops

Driveway Template Components

- Steps to Configure
  8. Add Corridor References
     - Driveway and Curb Face lines
  9. Re-Apply Superelevation Point Control
  10. Add Profile to BSW lines
     - Use Project Profile to Element
     - Select Model 3D lines then Plan 2D lines
     - Add line at Driveway Location
  11. Add Vertical Point Control for Driveway Template
     - BSW vertical from Profile

3D Driveway Civil Cells

- Steps to Configure
  1. Place Reference Line (ConstLines)
     - Left Side of Driveway
     - Along the EOP
  2. Add Profile to EOP and BSW lines
     - Use Project Profile to Element
     - Select Model 3D lines then Plan 2D lines
  3. Place 3D Urban Driveway Civil Cell
     - Modify as needed
  4. Add Corridor Clipping References
     - Drop Curb Linear Template
     - TieDown Slab Linear Template
     - DTMProposed Driveway Terrain
  5. Modify Main Curb Back Top width (Tolerance for clipping)
  6. Add Superelevation Point Control to Project

Summary

- Driveway Template Components Advantages
  - Faster Processing
  - Disadvantages
    - More setup
    - Gaps
    - Need to add more Corridor References, Horizontal Features Constraints HFC's

Method	Component Templates	3D Civil Cell
Setup	MORE!	Less
Processing Time	Less	MORE!
Gaps	Equal to Interval	None
Corridor Objects	References, HFC's	Clipping

Summary

- 3D Civil Cells
  - Advantages
    - Less setup
  - Disadvantages
    - Slower Processing
    - No Gaps
    - Corridor Clipping Objects

Method	Component Templates	3D Civil Cells
Setup	MORE!	Less
Processing Time	Less	MORE!
Gaps	Equal to Interval	None
Corridor Objects	References, HFC's	Clipping

Questions and comments

Thank you for attending !

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